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Minerals and the Tokyo Round of the MTN

By Daniel E. Sullivan

UNITED STATES DEPARTMENT OF THE INTERIOR

Information Circular 8854

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By Daniel E. Sullivan

UNITED STATES DEPARTMENT OF THE INTERIOR
James G. Watt, Secretary
BUREAU OF MINES

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

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MINERALS AND THE TOKYO ROUND OF THE MTN

by

Daniel E. Sullivan[1]

ABSTRACT

This Bureau of Mines publication examines the potential impact on minerals of the tariff and nontariff agreements that resulted from the Tokyo Round of the Multilateral Trade Negotiations, which were conducted under the auspices of the General Agreement on Tariffs and Trade. These agreements will affect minerals by reducing tariff levels and by changing rules by which they are traded internationally.

INTRODUCTION

World trade plays a significant role in the production, supply, and demand functions of the mineral industry. The changes resulting from the recent trade negotiations will have significant impacts on conditions in the mineral industry. It is vital that these impacts be considered by both Government and industry in their decisionmaking processes. The effects of these changes will be felt over time. Presently it is possible only to roughly estimate their nature and significance. This study was undertaken by the Bureau of Mines as part of its responsibility to aid Government decisionmaking in the area of trade policy and to improve the ability of industry to adjust to the changes that will occur in trade practices.

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Howard K. Andersen, formerly Department of the Interior representative on the Trade Policy Staff Committtee, provided invaluable information and advice in the preparation of this report.

THE MULTILATERAL TRADE NEGOTIATIONS (MTN)

HISTORY AND PROCEDURE

The Tokyo Round of the Multilateral Trade Negotiations (MTN) was concluded during 1979, after more than 4 years of negotiating. This was the seventh round of intergovernmental tariff talks to be conducted under the auspices of the General Agreement on Tariffs and Trade (GATT) since it was established in 1947.

Previous Agreements

GATT, which became effective on January 1, 1948, provided a means by which trading nations could bargain in a common forum with other participating countries. The resulting concessions granted to one country are then given Most-Favored-Nation treatment (MFN), which means that they are granted to all members. The result was a great improvement over the previous country-by-country trade negotiations, which were extremely time consuming.

GATT was founded as part of an effort to recover from the economic situation after World War II. It has grown, from an original membership of 23, to 84 members, with 3 provisional members. Twenty-four additional countries that had been under GATT as dependent territories and now are independent states maintain a de facto application of the GATT. There have been six previous rounds of trade negotiations, three dealing with accession or provisional accession only, and three mainly concentrating on tariff reductions. The Dillon Round in the early sixties and the Kennedy Round in the middle sixties, the fifth and sixth respectively, were concerned mainly with

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tariff reductions. The Tokyo Round also dealt with tariff reductions, but much more emphasis was put on the reduction of nontariff trade barriers.

Tokyo Round

The Tokyo Round was opened in September 1973 at a Meeting of Ministers in Tokyo. This meeting came about as a result of two similar declarations agreed upon in February 1972, one by the United States and the Commission of the European Economic Community (EEC) and the other by the United States and Japan. Each signatory agreed, subject to any internal authorization required, to initiate and support multilateral negotiations in the framework of GATT. The resulting meeting of GATT Ministers issued a declaration referred to as the Tokyo Declaration. It declared the multilateral trade negotiations officially open. It stated the aims of the negotiations. Included in these aims were the expansion and continued liberalization of world trade, an improvement in economic well-being worldwide, and an increase in the benefits of international trade received by developing countries. It outlined the efforts to solve in an equitable way the trade problems of all participating countries, with special consideration being given the problems of developing countries. Among the efforts listed were (1) conducting tariff negotiations with a formula applied as generally as possible; (2) reducing nontariff trade barriers, where possible, and where this is not possible, lessening their restricting or distorting effects and bringing them under more effective international discipline; (3) examining the sectoral approach; (4) examining the adequacy of the safeguard system; (5) taking account of the special characteristics and problems involved in negotiating the agricultural sector; and (6) treating tropical products as a special and priority sector.

Eventually 99 countries, 70 of them full GATT members, became involved in the negotiations. All of the industrialized countries pledged their full support to the Tokyo Round of trade negotiations.

Trade Act of 1974

The United States, which had helped to initiate the Tokyo Round, did not have negotiating authority until the Trade Act of 1974 became law in January 1975. The actual negotiations formally began in Geneva in February 1975. The Trade Act authorized the President to (1) negotiate duty reductions; (2) enter agreements for the reduction, elimination, or harmonization of nontariff barriers (NTB); (3) seek agreements to ensure access to supplies; (4) negotiate improvements in certain aspects of GATT; (5) take relief measures in case of injuries to domestic producers by imports; and (6) implement a generalized system of preferences (GSP) to benefit developing countries. The U.S. objectives in the negotiations were to facilitate the expansion of U.S. exports, stabilize relations with other industrialized countries, improve relations between industrialized and developing countries, and reduce abrasive trade problems with other countries.

Negotiations

The pace of the negotiations depended on international political and economic conditions and the speed of the internal decisionmaking processes of participating countries. Initially, it was quite slow. It quickened substantially during 1977 and 1978. In May 1977, the leaders of seven industrialized nations promised to put new impetus into the negotiations. As a result, a tariff plan and a procedure for dealing with nontariff measures were developed. In early 1978, the major participants presented their detailed offers of possible tariff and nontariff concessions, and it was agreed to attempt to have a final package for political approval in time for an economic summit meeting scheduled to take place in July. This dramatically increased the pace of the negotiations. Toward the end of June, it became apparent that a final package could not be agreed upon in time for the July meeting and it was decided to adopt a framework of understanding setting forth the areas of agreement and those still to be resolved. At the July meeting it was agreed to pursue the resolution of the outstanding issues and to conclude the detailed negotiations by December 15, 1978.

In October, the Congress was unable to pass legislation extending the January 3, 1979, expiration date of the authority to waive imposition of countervailing duties that had been necessary for the cooperation of certain other countries in the negotiations. This delayed the negotiations because several key countries expressed reservations about continuing to negotiate under threat of the application of countervailing duties.

The United States attempted to assure its negotiating partners that it would take measures to avoid the disruption of normal trade flows and promptly introduced legislation granting authority to the President to waive countervailing duties when Congress reconvened in January 1979. This legislation passed in late March 1979. On April 12, 1979, an agreement was approved that indicated that the negotiations had been completed on most elements and that those signing agreed to submit the results to their respective authorities for approval.

Ratification

The congressional ratification process was subject to rules established in advance. These rules required that the trade package be approved or rejected as a whole without amendment. In-depth consultations between the Executive Branch and Congress were necessary to insure that the trade package was satisfactory to all before it came to a vote. Late in July 1979, the trade package was ratified and the Trade Agreements Act of 1979 resulted.

RESULTS

Industrial Tariffs

The reductions in tariffs, which are being implemented by the major industrialized countries, in general are to be phased

in over an 8-year period that started on January 1, 1980. Developing countries, with some exceptions, will not be reducing tariffs. It is difficult to measure the significance of tariff reductions because it is not possible to correctly assess the volume of trade that will be generated by the new duties. In the negotiation process the past volume of trade had been used in weighing the significance of a particular tariff cut. Two methods have been used to calculate the average level of tariffs. The first is the simple arithmetic average of duty rates. This does not reflect the relative importance of each duty in terms of trade volume affected. An atypical duty rate on a minor trade volume will have the same impact on the average as a duty on a high-volume import. The second methodology takes the trade volume into account. It is the weighted average of duties based on the level of imports affected by each duty. This gives a measure of the average duty collection. These methodologies have been used to make preliminary estimates of the reduction in the level of duties for selected developed markets. They show that the level of duties as measured by trade volume has been reduced 33 percent; as measured by a simple average it has been reduced 38 percent.

Unless otherwise noted all averages discussed will be trade-weighted. The average U.S. tariff on all industrial imports (dutiable plus duty free, excluding petroleum) will decline from 6.1 to 4.2 percent (a cut of 32 percent). The European Community tariffs will be cut 27 percent (from 6.3 to 4.6 percent). Since the Kennedy Round, both Canada and Japan have made certain nonbinding tariff reductions. As a result, their applied tariff rates were lower than GATT-bound rates (the rates they were allowed to charge under the GATT). For Canada the reduction was 38 percent on GATT rates (from 12.0 to 7.4 percent) and 32 percent on their applied rates (from 10.1 to 6.9 percent). For Japan, the reduction in their GATT rates was 50 percent (from 5.0 percent to 2.5 percent) and the reduction in their applied rates was 28 percent (from 3.2 to 2.3 percent).

These figures show the average reduction in all the tariffs of a country, but they do not show how the tariff reductions affect bilateral trade. The U.S. tariffs on industrial goods imported from the European Community were reduced an average of 35 percent; those of the European Community on industrial goods imported from the United States were reduced 34 percent. U.S. tariffs on Japanese industrial trade were reduced 32 percent as Japanese tariffs (applied rates) on U.S. industrial products were reduced 47 percent, and the United States reduced tariffs on Canadian industrial products 45 percent as Canada reduced tariffs (applied rates) on U.S. industrial products 35 percent.

The United States cut the average rate for all ferrous metal products 26 percent (from 4.6 to 3.4 percent); for all nonferrous metal products the cut was 43 percent (from 1.6 to 0.9 percent); for all stone, clay, and glass products, 36 percent (from 6.2 to 4.0 percent); and for industrial chemicals and fertilizers, 35 percent (from 2.5 to 1.6 percent). The other major industrialized countries also made cuts in their tariffs on these products as shown in table 1.

The level of the U.S. tariff reductions varies among the different sectors of the economy and also among different mineral commodities. Some mineral commodities such as nickel, phosphate rock, bauxite, tin, crude sulfur, iron ore, pig iron, asbestos, chromium ores, cobalt ore, copper ore, titanium ores, manganese ores, and vanadium ores were duty-free prior to the Tokyo Round and are not affected. Other mineral commodities such as high-carbon ferrochrome, cobalt oxide and linoleate, fluorspar, lead ore, unwrought manganese metal, and vanadium compounds were exceptions. This means that they were withheld from the negotiating process by the United States, and no cuts are to be made in their tariff rates. The tariff rates for most mineral commodities are to be reduced over an 8-year period (appendix). The level of reduction reflects estimated sensitivity of domestic industry to imports, and the results of the negotiation process.

Nontariff Agreements

The nontariff agreements, discussed in general terms in the following, are not directed specifically at minerals, but at trading problems in general. Their impacts on minerals are discussed later.

Subsidies

The Subsidies and Countervailing Duties Code limits export subsidy practices and places greater control on the use

TABLE 1.—Average tariff reductions by selected countries on mineral commodities purchased from the United States, percent

Purchaser	Ferrous metals and products	Nonferrous metals and products	Stone, clay, and glass products	Industrial chemicals and fertilizers
European Community	26	21	27	33
Canada	37	38	37	45
Applied[1]	37	40	37	25
Japan	58	54	48	41
Applied[1]	24	26	34	24
Sweden	21	21	17	69
Norway	31	15	40	48
Finland	16	32	5	42
Switzerland	17	26	22	12
Austria	23	44	50	43

[1] Nonbinding tariff reductions.
Source: Twenty-Fourth Annual Report of the President of the United States on the Trade Agreements Program, 1979.

of countervailing duties. Export promotion subsidies have always been discouraged by the rules of GATT, although domestic subsidies have been allowed. It may be impossible to differentiate between domestic subsidies and export promotion subsidies. GATT rules require a subsidizing country to discuss the possibility of limiting a subsidy when it is determined to cause or threaten to cause injury to the interests of another country. Injured countries are permitted to impose countervailing duties on imports of products that are subsidized after determining that the imports are causing or threatening to cause material injury to their industries.

In recent years an increased use of subsidies by Governments to promote domestic social goals and the expansion of world trade have combined to increase the impact of domestic subsidies on other countries. This has caused pressure for changes in the international rules dealing with subsidies and countervailing duties. The new code is intended to improve international policy on subsidies. It permits subsidies for domestic social and economic policies, but countries are committed to take into account conditions of world trade and production in fashioning their subsidy practices. Countervailing duties are allowed only if subsidies cause or threaten to cause "material injury" to domestic industry. In the past the United States did not require a determination of injury. The definition of "material injury" has been difficult to determine. The U.S. implementing legislation defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant." What this will mean in practice is yet to be determined. This is not expected to have an immediate impact on the United States because the United States has waived most countervailing duties for the past few years.

Antidumping

The new antidumping code also allows duties to be imposed in the event of injury due to dumping. Dumping is the selling of products in foreign markets at a lower price than is charged for the same good in the domestic market. The effects of dumping can be the same as a subsidy.

Standards

The Standards Code, or the Code of Conduct for Preventing Technical Barriers to Trade, is designed to discourage discriminatory manipulations of product standards, testing, and certification systems. Standards can be used as technical barriers to trade. Governments have a right to protect consumers by establishing reasonable standards that all products must meet. However, standards have been used to protect a domestic market from imports. This can be done through imposing standards that do not appear to benefit consumers, or through the administration of the standards in ways that are time consuming and duplicative or emphasize minor details. Countries that sign this code agree that standards are not to be adopted or applied with the intention of creating barriers to trade and that imported goods should be subject to the same standards as domestic goods. Countries are to adopt international standards when possible and publish details when their standards differ from international norms. They should also provide a point of inquiry where questions can be dealt with efficiently. The effect of this code will be felt in the long run. The United States could benefit if it results in a decrease in the number of technical barriers to trade since the United States is a major exporter of technically sophisticated items that are particularly vulnerable to these barriers.

Customs Valuation

The customs valuation system is the method of establishing the value of imported goods for the assessment of customs duties. The Customs Valuation Agreement is an attempt to insure that the methods used are fair and simple and conform to commercial reality and that traders will be able to know in advance the level of duty they will be obligated to pay. Customs valuation can be used to inflate a tariff to a higher level than is implied by the nominal rate. U.S. exporters have complained that foreign customs officials sometimes arbitrarily inflate the value of U.S. products, resulting in higher duties. Foreign exporters have criticized U.S. customs valuation methods. The United States uses nine different methods which they allege are not applied uniformly. One of these, the American Selling Price (ASP) method, is usually said to be unfair. Using this method, certain selected goods are valued at the price of similar goods produced in the United States rather than on the basis of their export value. The new Customs Valuation Agreement establishes the "transactions value" as the primary method for valuing imports. It also defines four alternative methods to be used if the primary method is not applicable. The United States will no longer use the ASP valuation method, but those goods that were valued this way have had their tariffs adjusted upward so that the level of protection remains unchanged. This code may clarify and simplify customs valuation procedures, but because duties affected will be adjusted there will probably be no near-term changes in trade flows.

Government Procurement

The Government Procurement Code is intended to discourage discrimination against foreign suppliers when Governments purchase articles for their own use. In the past the GATT specifically exempted Government procurement from the general provisions of the agreement. Governments had been free to discriminate against foreign products in their procurement decisions. Due to the growth in Government spending and Government enterprise in recent years, there has been growing pressure to negotiate agreements that will reduce the discrimination against the procurement of foreign products. This pressure has been especially strong in the United States because foreign governments play greater roles in their economies and it is felt in the United States that discrimination in Government procurement has a greater impact on U.S. exporters than on foreigners exporting to the United States. This feeling is reinforced because the United States often has a comparative advantage in the types of goods that are purchased by Governments, for example, electronic, communication, and transportation equipment.

The procurement code specifies that the treatment of products from a signatory country be no less favorable than that afforded to domestic products or those of any other country. Excluded from these provisions are contracts valued at less

than about $190,000 and procurement of military and certain related goods. Studies have been done to determine the impact of this code (1,3)[2]. They show a positive impact on the U.S. economy but do not agree on the magnitude of this impact.

Licensing

The Import Licensing Code deals with the administration of import licensing procedures. Licensing of imports as a means of controlling the use of scarce foreign exchange is practiced by many countries. Import licenses sometimes have been administered arbitrarily or used as a means of discriminating against imports of particular countries. There has been much criticism of arbitrarily denying applications or unreasonable delays in the granting of licenses. The new code requires that procedures be applied in a nondiscriminatory manner to the products from all signatory countries. It also requires that procedures be as simple, open, and transparent as possible, and that applications not be rejected because of minor errors. This code is not expected to have a major short-term impact on U.S. trade.

Aircraft

This agreement eliminates all tariffs on nonmilitary aircraft, engines, aircraft parts, and flight simulators. It also involves agreements to reduce the possibility of subsidies and discrimination in purchases. The United States is the world's primary producer of civil aircraft, so it should benefit from this agreement.

Agriculture

The Agriculture Agreements, which involve both tariff and nontariff agreements, will benefit the United States as a major exporter of agricultural products, but will not affect minerals.

[2] Underlined numbers in parentheses refer to items in the bibliography preceding the appendix.

GATT Reform

The reform of the GATT framework consists of a set of four texts and an agreement to reassess GATT rules on export controls following the MTN. The first text is titled "Discussion on Differential and More Favorable Treatment and Reciprocity and Fuller Participation of Developing Countries." It incorporates the "enabling clause" which provides a legal framework within the GATT for differential and more favorable treatment for developing countries. This covers special arrangements such as the Generalized System of Preferences (GSP) and other differential treatment with respect to provisions of the GATT. This first text also incorporates "reciprocity" and "graduation" clauses by which it is agreed that developed countries do not expect full reciprocity from developing countries for commitments made to developing countries by developed countries in future trade negotiations, but developing countries agree to accept greater obligations under the GATT as their economic situations improve (graduation).

The second text is titled "Declaration on Trade Measures for Balance-of-Payments Purposes." It provides the framework for such measures. It also emphasizes that such measures are inefficient means for dealing with the problems and developed countries should avoid their use. The third text is titled "Decision on Safeguard Action for Development Purposes." It recognizes that safeguard action may be necessary to improve the situation of infant industries in developing countries and outlines procedures for such actions under GATT. Safeguard action would be a temporary restriction of imports in the case of serious injury. The fourth text is titled "Understanding Regarding Notification, Consultation, Dispute Settlement and Surveiliance." This text represents a tightening up of the existing GATT procedures for consultation and the resolution of disputes. An agreement reassessing the GATT rules on export controls was not reached owing to the resistance of developing countries and some developed countries to address the issue, but it was agreed to address the issue following the MTN.

HOW THE MINERAL INDUSTRY MAY BE AFFECTED

TARIFFS

Situation Prior to the MTN

Tariffs on most minerals were already at relatively low levels owing to previous negotiations and the impact of inflation on specific rates that are in specific dollar terms. (This alone does not mean these tariffs are not significant, as will be discussed later.) The average U.S. tariff rate for all dutiable and duty-free industrial imports excluding petroleum was 6.1 percent. For ferrous metals and products the average rate was 4.6 percent; nonferrous metals and products 1.6 percent; stone, clay, and glass products 6.2 percent; and industrial chemicals and fertilizers 2.5 percent. Of these mineral products, only stone, clay, and glass products had an average rate higher than the overall industrial average and this is only one-tenth of a percentage point higher. The others were from 1.5 to 4.5 percentage points below the overall industrial average. The original tariff rates for individual mineral commodities ranged from more than 20 percent ad valorem to free, as is shown in the appendix. The average mineral tariff rates of most other industrialized countries followed similar patterns.

Changes as a Result of the Negotiation

As a result of the Tokyo Round of the MTN, tariff rates are due to be reduced for most commodities. These reductions generally are to be staged over an 8-year period. The average rate for all dutiable and duty-free commodities, excluding petroleum, is to be cut 32 percent. The average tariff rates for nonferrous metals and products, stone, clay, and glass products, and industrial chemicals and fertilizers are all to be cut by a greater percentage than the overall average. Ferrous metals and products are to be cut 26 percent. When these reductions are completed, none of these categories of mineral products will have an average tariff greater than the overall industrial average. The tariff reductions, including staging, for selected mineral products are shown in the appendix.

Assessment

The impact of the U.S. tariff reductions on the domestic mineral sector should not be great. The reductions for most commodities will be staged over an 8-year period. The commodities whose tariffs are to be reduced were determined to be less sensitive to imports after careful examination. The level of tariffs on mineral commodities was already low, although a low tariff can be highly protective if the demand for the commodity is price elastic. Demand is price elastic if a given percentage increase in price results in a greater percentage reduction in the quantity demand and a given percentage decrease in price results in a greater percentage increase in the quantity demanded. Demand is price inelastic when a percentage change in price results in a smaller change in the quality demanded. The fact that other countries are also making reductions in their tariffs on mineral commodities will reduce the possibility of negative impact on the U.S. industry. A study (1) by the Department of Labor on the trade and employment effects of the tariff reductions in the Tokyo Round indicates an overall increase of 30,000 job opportunities as a result of an increase in net exports of $100 million. This is a net result of an estimated increase of 167,000 job opportunities due to a $3,300 million increase in exports and a decrease of 137,000 job opportunities due to a $2,300 million increase in imports. For the mining industry as a whole it is estimated that there will be a net increase of 300 job opportunities as a result of an increase in net exports of $5 million. This net result is based on an increase of 1,900 job opportunities as a result of increased exports of $11 milllion and a decrease of 1,600 job opportunities related to increased imports of $6 million.

Within the extractive industry, iron and ferroalloy ores are expected to increase net exports by $1,861,000 but decrease 21 job opportunities owing to more jobs related to a smaller increase in imports. The nonferrous metal ore industry will do the opposite: net exports will be a net increase of 21 job opportunities: net exports will decline $615,000 but there will be a net increase of 21 job opportunities. Net exports for stone and clay mining will increase $1,015,000 and job opportunities will increase 36. Chemicals and fertilizer minerals exports will decline $2,446,000 and job opportunities will decrease by three.

For the primary iron and steel industry, the study estimates a decline of $109 million in net exports, resulting in a loss of seven job opportunities. For nonferrous metals, the estimate is a decrease of $14 million in net exports but an increase of 637 job opportunities; for the stone and clay products industries, a decline of $48 millon in net exports is estimated resulting in a loss of 1,865 job opportunities. Chemicals are expected to increase net exports by $85 million, resulting in a gain of 1,361 job opportunities. Since the reductions are to be staged over an 8-year period, these estimated impacts are also for an 8-year period.

A study done for the Subcommittee on International Trade of the Senate Committee on Finance (3) estimates an increase in overall employment as a result of the tariff cuts of about 2,300 workers, including for the basic iron and steel industry, an increase of 1,200 workers; for the basic nonferrous metals industry, an increase of 400 workers; for pottery and other nonmetallic minerals, a decline of 1,400 workers; for glass and glass products an increase of 100 workers; and for chemicals an increase of 3,500 workers.

These estimates vary from those of the Department of Labor study owing to the use of different definitions and methodologies; however, these studies give the general impression that the metals industries will not be adversely affected by the tariff cuts, the chemical industry will benefit, and the nonmetallic minerals industry may suffer some adverse impact.

NONTARIFF AGREEMENTS

Agreements That May Affect the Minerals Sector

All of the nontariff agreements, with the exception of the agriculture agreements, will have an impact on the minerals sector. None are specifically minerals agreements, but they deal with problems that can have significant effects on the minerals sector such as subsidies, dumping, standards, customs valuation, Government procurement, licensing, and civil aircraft.

Changes in the Minerals Sector That May Occur as a Result of These Agreements

The subsidies and countervailing duties agreement is not expected to have an immediate impact on the U.S. mineral industry because, although the existing U.S. law did not have an injury test, the United States waived most countervailing duties during the MTN. In the long run, improving international policy on subsidies will be beneficial to the mineral sector. Limiting subsidy practices will lessen the chance of an oversupply situation in the world market caused by continued production when demand, as reflected in market prices, does not warrant it. The mineral sector will be protected from subsidized competition. The code will create an opportunity to streamline U.S. investigation procedures, and this may improve the protection against unfair trade practices. The pro-

tection sanctioned by the Antidumping Code will benefit the mineral sector in the event of dumping in the same manner as the protection sanctioned by the Subsidies Code benefits the mineral sector in the event of export subsidies.

The Government Procurement Code and the Civil Aircraft Agreement will open markets for U.S. mineral products. Foreign Government purchases are growing, and this agreement makes it easier for the U.S. mineral sector to participate in these expanding markets. The Civil Aircraft Agreement improves the ability of the U.S. aircraft industry to sell in the world market and increases the demand for those minerals needed in the manufacture of aircraft.

The Customs Valuation Agreement, the Import Licensing Code, and the Standards Code all are designed to improve the flow of goods in world trade. The benefits of this improvement will be shared by those who trade mineral commodities.

The reform and updating of the GATT framework could affect mineral trade. The "enabling clause" provides a legal basis for preference systems for developing countries, such as GSP. The U.S. GSP system is not intended for import-sensitive industries, and there may be occasions when domestic mineral industry is affected by GSP imports. The "reciprocity clause" in which the developed countries agree that in future negotiations they will not seek concessions from developing countries that are inconsistent with their needs, and the "graduation clause" in which developing countries agree that when they progress economically they will participate more fully in the rights and obligations of the trading system, could affect the flow of minerals between developed and developing countries in the short and long term. The safeguard provisions for development and for balance of payments purposes could also affect mineral trade. The text on dispute settlement should improve the handling of trade disputes in the GATT. The agreement to reassess the rules on export controls after the MTN could have a great impact on the supply access of minerals.

CONCLUSIONS AND RECOMMENDATIONS

The Tokyo Round of the MTN has been concluded successfully. It was the seventh round held under the auspices of the GATT since 1948 and the first one to emphasize nontariff agreements along with tariff reductions.

The tariff reductions of the Tokyo Round are significant for the economy as a whole. The trade-weighted average of duties for selected developed markets will be reduced 33 percent. The impact of the tariff reductions on the mineral sector should not be large. This is because the level of tariffs on mineral commodities was already low, and for most commodities, the reductions will be staged over an 8-year period. Also, other developed countries will make similar reductions in their mineral tariffs.

The main emphasis of the Tokyo Round was the lessening of the trade-distorting effects of nontariff trade barriers. The results of this effort are the nontariff agreements. Their purpose is to promote a more open, fairer trading system. This can benefit the U.S. mineral sector both domestically and in exporting mineral commodities. Domestically the agreements can lessen the possibility of being harmed by imports that are the beneficiaries of unfair trade practices. In the export market the elimination of nontariff trade barriers (NTB's) will put U.S. mineral exports in a more equitable position.

Not all goals were achieved in these negotiations. Reassessment of the rules on export controls, which could have a great impact on the supply access of minerals, will be taken up following the MTN. Another negotiation that was not completed included a safeguard agreement that would permit a country to take emergency action to temporarily restrict imports in case of serious injury.

Although the Tokyo Round has been concluded, trade matters continue to require close attention and consultations. The final trade package is the result of compromise in which each side achieved only part of what it wanted. The ideal of a fair and open trading system requires continual surveillance for disruptions and responses that minimize their impact.

Actions that can improve trade, and mineral trade in particular, should be taken. These actions include efforts to see that agreements that have been negotiated are put into effect in the way intended. Efforts also should be made to complete negotiations of agreements that were incomplete at the close of the MTN, such as export controls, and safeguards. Areas where agreements may be needed in the future should be explored. The impact of changes in the tariff levels stemming from the Tokyo Round should be monitored to determine where adjustments may be needed.

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APPENDIX.—Post-MTN tariff rates for selected mineral commodities

Commodity	TSUS number	Unit of measure	Rate from which staged	1980	1981	1982	1983	1984	1985	1986	1987
Aluminum:											
Unwrought (in coils)	618.01	Pct ad val	3.2	3.1	3.1	3.0	2.9	2.8	2.8	2.7	2.6
Unwrought (other than aluminum alloys)	618.02	Cent lb	1.0	.8	.7	.6	.5	.3	.2	.1	Free
Wrought (bars, plates, sheets, strip)	618.25	Pct ad val	3.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Antimony:											
Ore	601.03	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Liquated	603.10	Cent lb	.1	.1	.1	.1	.1	.1	.1	.1	.1
Metal, unwrought	632.02	do	1.0	.9	.8	.6	.5	.4	.3	.1	Free
Argon:											
Other physical elements in any physical form (includes argon)	415.50	Pct ad val	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Arsenic:											
Metal	632.04	Cents lb	2.0	1.8	1.5	1.3	1.0	.8	.5	.3	Free
White arsenic	417.62	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Asbestos	518.11	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Barite:											
Crude barite	472.10	Dollars ton	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27
Ground barite	472.12	do	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25
Blanc fixe	472.14	Cent lb	.3	.2	.2	.2	.2	.2	.2	.2	.2
Bauxite:											
Bauxite	601.06	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Bauxite, calcined	521.17	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Alumina	417.12	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Beryllium:											
Ore and concentrate	601.09	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Unwrought waste and scrap	628.05	Pct ad val	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
Wrought	628.10	do	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Beryllium-copper master alloy	612.20 A	do	10.6	10.0	9.5	8.9	8.3	7.7	7.2	6.6	6.0
	612.20 B	Cent lb	.75	.7	.6	.6	.5	.5	.5	.4	.4
		+ Pct ad val	10.0	9.4	9.9	9.3	7.8	7.2	6.6	6.1	5.5
Oxide or carbonate	417.90	Pct ad val	5.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Other compounds	417.92	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Bismuth:											
Metal, unwrought	632.10	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Alloys	632.66	Pct ad val	9.0	8.6	8.1	7.7	7.3	6.8	6.4	5.9	5.5
Compounds	418.00	do	14.0	13.1	12.3	11.4	10.5	9.6	8.8	7.9	7.0
Mixtures of 2 or more inorganic compounds, in chief value bismuth	432.80	do	14.0	13.1	12.3	11.4	10.5	9.6	8.8	7.9	7.0
Boron:											
Boric acid	416.10	do	3.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Calcium borate, crude	418.12	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Manganese borate	419.40	Pct ad val	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Sodium borate, crude	420.76	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Sodium borate, other	420.78	Cent/lb	.06	.06	.05	.05	.04	.04	.04	.03	.03
Boron carbide	422.90	Pct ad val	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Ferroboron	606.53	do	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Bromine:											
Bromine	415.05	Cents/lb	5.0	4.6	4.3	3.9	3.5	3.1	2.8	2.4	2.0
Potassium bromide	420.02	do	2.0	1.9	1.9	1.8	1.7	1.7	1.6	1.5	1.5
Sodium bromide	420.82	do	8.0	7.4	6.7	6.1	5.5	4.9	4.2	3.6	3.0
Ethylene dibromide	429.28	Cents/lb	1.2	1.1[1]	1.0	1.0	.9	.8	.8	.7	.7
		+ Pct ad val	6.0	5.7	5.4	5.1	4.8	4.4	4.1	3.8	3.5

[1] 1980 TSUS not implemented until July 1, 1980.

Commodity	TSUS number	Unit of measure	Rate from which staged	1980	1981	1982	1983	1984	1985	1986	1987
Cadmium:											
Flue dust	603.20	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Metal	632.14	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Cement:											
White nonstaining portland cement	511.11	Cent/100 lb.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Other hydraulic cement and clinker	511.14	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Cesium:											
Pollucite	601.66	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Cesium	415.10	Pct ad val	8.5	8.1	7.7	7.3	6.9	6.5	6.1	5.7	5.3
Cesium chloride	418.50	do	6.0	5.8	5.5	5.3	5.0	4.8	4.5	4.3	4.0
Other compounds	418.52	do	5.0	4.9	4.8	4.6	4.5	4.4	4.3	4.1	4.0
Chromium:											
Ore and concentrate	601.15	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Low-carbon ferro-chromium	606.22	Pct ad val	4.0	4.0	4.0	3.9	3.7	3.6	3.4	3.3	3.1
High-carbon ferro-chromium	606.24	do	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Clays:											
China clay and kaolin	521.41	Cents ton	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
Fuller's earth:											
Not beneficiated	521.51	do	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Wholly or partly beneficiated	521.54	do	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Bentonite	521.61	do	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Ball clays:											
Not beneficiated	521.71	do	42.0	41.5	41.0	40.5	40.0	39.5	39.0	38.5	38.0
Wholly or partly beneficiated	521.74	do	85.0	84.0	83.0	82.0	81.0	80.0	79.0	78.0	77.0
Other clays:											
Not beneficiated	521.81	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Wholly or partly beneficiated	521.84	Cents ton	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Cobalt:											
Ore and concentrate	601.18	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Unwrought metal, waste and scrap	632.20	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Alloys, unwrought	632.86	Pct ad val	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Oxide	418.60	Cents lb	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Linoleate	490.40	do	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Columbium:											
Concentrate	601.21	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Ferrocolumbium	606.53	Pct ad val	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Unwrought, metal, waste and scrap	628.15	Pct ad val	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Alloys	628.17	do	7.5	7.2	6.9	6.5	6.2	5.9	5.6	5.2	4.9
Wrought	628.20	do	9.0	8.6	8.1	7.7	7.3	6.8	6.4	5.9	5.5
Copper:											
Ore	602.30	Cent lb Cu content	.8	Free	Free	Free	Free	Free	Free	Free	Free
Unwrought:											
Cement copper and copper participates	612.02 A	Pct ad val on value of Cu content	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	612.02 B	Cent lb Cu content	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Black copper, blister copper, and anode copper	612.03 A	Pct ad val on value of Cu content	1.4	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.0
	612.03 B	Cent lb on 99.6 pct of Cu content	1.0	.96	.92	.88	.85	.81	.77	.73	.70

Nickel silver	612.05 A	Pct ad val	6.8	6.5	6.3	6.0	5.7	5.4	5.2	4.9	4.6
	612.05 B	Cent lb on Cu content + pct ad val	5.0	4.8	4.6	4.4	4.3	4.1	3.9	3.7	3.5
Other	612.06 A	Pct ad val	1.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	612.06 B	Cent lb on Cu content	1.0	.75	.75	.75	.75	.75	.75	.75	.75
Waste and scrap:											
Nickel and silver	612.08 A	Pct ad val	6.0	5.6	5.1	4.7	4.2	3.8	3.3	2.9	2.4
	612.08 B	Cent lb on 99.6 pct of Cu content	1.0	.9	.8	.7	.7	.6	.5	.4	.4
		+ Pct ad val	5.0	4.5	4.3	3.9	3.5	3.1	2.8	2.4	2.0
Other	612.10 A	Pct ad val	1.5	1.3	1.1	.9	.8	.6	.4	.3	Free
	612.10 B	Cent lb on 99.6 pct of Cu content	1.0	.9	.8	.7	.7	.6	.5	.4	.4
Corundum:											
Ore and concentrate	519.17	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Graded materials	519.37	Cent lb	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Diamond (industrial):											
Synthetic	520.21	Pct ad val	7.5	6.9	6.4	5.8	5.3	4.7	4.1	3.6	3.0
Miners'	520.23	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Crushing bort	520.27	....do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Powder or dust	520.28	....do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Other:											
Not advanced in condition or value	520.29	....do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Advanced in condition or value	520.31	Pct ad val	7.5	7.2	6.9	6.5	6.2	5.9	5.6	5.2	4.9
Diatomite: Crude or processed	522.11	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Feldspar:											
Crude	522.31	....do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Ground	522.41	Pct ad val	3.5	3.4	3.3	3.2	3.2	3.1	3.0	2.9	2.8
Fluorspar:											
Acid-grade (more than 97 pct CaF2)	522.21	Dollars ton	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Metallurgical-grade (less than 97 pct CaF2)	522.24	Pct ad val	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
Gallium:											
Compounds	423.00	Pct ad val	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Metal	632.24	....do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Garnet:											
Crude	520.11	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Grain	519.37	Cent lb	.4	.3	.3	.3	.3	.3	.3	.3	.3
Gem stones:											
Natural precious and semiprecious stones	520.11	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Diamond, cut, unset, less than 1/2 carat	520.32	Pct ad val	4.0	1.0	Free	Free	Free	Free	Free	Free	Free
Diamond, cut, unset, over 1/2 carat	520.33	....do	5.0	2.0	Free	Free	Free	Free	Free	Free	Free
Rubies, sapphires, cut, unset	520.35	....do	4.0	1.0	Free	Free	Free	Free	Free	Free	Free
Marcasites, cut, unset	520.37	....do	5.0	4.4	3.8	3.1	2.5	1.9	1.3	.6	Free
Emeralds, cut, unset	520.38	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Other, cut, unset	520.39	Pct ad val	2.5	2.5	2.4	2.4	2.3	2.3	2.2	2.2	2.1
Precious stones, n.p.f.e.	520.51	....do	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Rock crystal, n.p.f.e.	520.54	....do	10.5	9.9	9.4	8.8	8.3	7.7	7.1	6.1	6.0
Other, n.p.f.e.	520.61	....do	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
Synthetic gem-stone-quality materials, cut, unset	520.71	....do	4.0	3.9	3.8	3.7	3.6	3.4	3.3	3.2	3.1
Other synthetic gem-stone-quality materials	520.75	....do	15.0	15.0	15.0	13.5	12.0	10.5	9.0	7.5	6.0

Commodity	TSUS number	Unit of measure	Rate from which staged	1980	1981	1982	1983	1984	1985	1986	1987
Germanium:											
Germanium dioxide	423.00	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Metal, unwrought, waste and scrap	628.25	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Metal, wrought	628.30	do	9.0	8.6	8.1	7.7	7.3	6.8	6.4	5.9	5.5
Gold:											
Not rolled, unwrought (except bullion, dore, and precipitated):											
Platinum or silver plated	605.27	Pct ad val	16.0	14.9	13.9	12.8	11.8	10.7	9.6	8.6	7.5
Other	605.28	do	20.0	18.5	17.1	15.6	14.1	12.6	11.2	9.7	8.2
Rolled, unworked, or semimanufactured:											
Plates and sheets	605.60	do	12.0	11.3	10.6	9.9	9.3	8.6	7.9	7.2	6.5
Other	605.66	do	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Compounds	418.80	do	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Salts of organic acids	427.28	do	5.0	4.8[1]	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Graphite, natural:											
Crystalline flake (not including flake dust):											
Valued not over 5.5c lb	517.21	do	7.5	6.9	6.4	5.8	5.3	4.7	4.1	3.6	3.0
Valued over 5.5c lb	517.24	Cent lb	4	.3	.3	.3	.3	.3	.3	.3	.3
Lump and chip	517.27	Pct ad val	2.5	Free	Free	Free	Free	Free	Free	Free	Free
Other	517.31	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Gypsum:											
Crude	512.21	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Ground or calcined	512.24	Cents ton	59	57	55	53	50	48	46	44	42
Gypsum or plaster building board	245.70	Pct ad val	6.0	5.6	5.1	4.7	4.2	3.8	3.3	2.9	2.4
Hafnium:											
Unwrought, waste and scrap	628.35	do	5.0	4.4	3.8	3.1	2.5	1.9	1.3	.6	Free
Wrought	628.40	do	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Helium:											
In any physical form	415.50	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Helium-4 (nonradio-active isotopes)	494.52	do	5.0	4.4	3.8	3.1	2.5	1.9	1.3	.6	Free
Ilmenite:											
Titanium ore (including ilmenite and ilmenite sand)	601.51	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Titanium slag	603.62	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Indium:											
Metal, unwrought, waste and scrap	628.45	Pct ad val	5.0	2.0	1.7	1.4	1.1	0.8	0.6	0.2	Free
Metal, wrought	628.50	do	9.0	8.3	7.7	7.0	6.3	5.6	5.0	4.3	3.6
Compounds	423.06	do	5.0	4.4	3.8	3.1	2.5	1.9	1.2	.6	Free
Iodine:											
Crude	415.25	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Resublimed	415.27	Cents lb	8.0	7.7	7.5	7.2	7.0	6.7	6.5	6.2	6.0
Potassium iodine	420.20	Pct ad val	3.5	3.4	3.3	3.2	3.2	3.1	3.0	2.9	2.8
Iron ore	601.24	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Iron and steel:											
Pig iron	606.13	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Structual steel	609.80	Pct ad val	1.0	1c lb	1c lb	.9	.9	.9	.9	.9	.9
Iron and steel scrap:											
Tin plate waste and scrap	606.08	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Other, not containing 0.2 Cr, 0.1 Mo, 0.3 W, or 0.1 V	606.09	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Containing 0.2 Cr, 1 Mo, 3 W, or 1 V	606.11	Pct ad val + additional duties	1.0	18c ton	18c ton	Free	Free	Free	Free	Free	
Kyanite and related minerals:											
Kyanite, sillimanite, andalusite, and dumortierte	523.81	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Mullite	523.91	Pct ad val	7.5	7.2	6.9	6.5	6.2	5.9	5.6	5.2	4.9

Lead:											
Ore	602.10	Cents/lb Pb	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Unwrought:											
Bullion	624.02	Pct ad val on value of Pb	5.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Other	624.03	do	5.1	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Dross	603.25	Cents/lb of Pb content	1.0625	1.04	1.02	1.00	.98	.96	.94	.92	0.9
Lime:											
Hydrated	512.11	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Other	512.14	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Lithium:											
Mineral concentrates	523.11	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Metal	415.30	Pct ad val	12.5	11.8	11.0	10.3	9.6	8.8	8.1	7.3	6.6
Compounds	419.10	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Magnesium and magnesium compounds:											
Unwrought:											
Metal	628.55	do	20.0	19.0	18.0	16.5	15.0	13.5	12.0	10.0	8.0
Alloys	628.57	do	12.1	7.3	7.2	7.1	7.0	6.8	6.7	6.6	6.5
Wrought metal	628.59	Cents/lb on Mg content + pct ad val	6.5¢ 3.5	6.2 3.4	6.0 3.3	5.7 3.1	5.5 3.0	5.2 2.9	5.0 2.8	4.7 2.6	4.5 2.5
Crude magnesite	522.61	Dollars/ton	2.62	2.29	1.96	1.64	1.31	.98	.65	.33	Free
Caustic-calcined magnesite	522.64	do	5.25	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Maganese:											
Ore and concentrate	601.27	Cent/lb of Mn content	.12	Free	Free	Free	Free	Free	Free	Free	Free
Metal:											
Waste and scrap	632.28	Pct ad val	14.0	13.0	11.9	10.9	9.8	8.8	7.7	6.7	5.6
Unwrought	632.30	do	1.5¢ + 10.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
High-carbon ferromanganese	606.30	do	1.7	.3¢/lb Mn	.3¢/lb Mn	1.6	1.6	1.6	1.5	1.5	1.5
Mercury: Metal, waste, and scrap	632.34	Cents/lb	12.5	11.9	11.3	10.6	10.0	9.4	8.8	8.1	7.5
Mica (natural) scrap and flake:											
Phlogopite:											
Untrimmed, under 2 in^2 when trimmed	516.11	Pct ad val	2.5	Free	Free	Free	Free	Free	Free	Free	Free
Waste and scrap valued under 5¢/lb	516.21	do	6.0	5.8	5.6	5.3	5.1	4.9	4.7	4.4	4.2
Other waste and scrap under 5¢/lb	516.24	do	6.0	3.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Mica (natural sheet:											
Phlogopite, untrimmed	516.11	do	2.5	Free	Free	Free	Free	Free	Free	Free	Free
Split block	516.31	None	Free	Free	Free	Free	Free	Free	Free	Free	
Other block	516.41	do	Free	Free	Free	Free	Free	Free	Free	Free	
Splittings	516.51	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Film not cut or stamped	516.61	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Film cut or stamped	516.71	Pct ad val	11.0	8.0	5.0	4.4	4.4	4.4	4.4	4.4	4.4
Block cut or stamped, not perforated, indented	516.73	do	12.5	9.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0
As above, other forms	516.74	do	20.0	17.0	14.0	11.0	8.0	8.0	8.0	8.0	8.0
As above, performated, indented	516.76	do	12.5	9.5	6.5	5.0	5.0	5.0	5.0	5.0	5.0
Molybdenum:											
Concentrate	601.33	Cents/lb mo content	12.0	11.0	11.3	10.9	10.5	10.1	9.8	9.4	9.0
Ferromolybdenum	606.31	+ Pct ad val	6.6	10.0 3.0	10.0 3.0	6.3	5.9	5.6	5.2	4.9	4.5
Nickel:											
Ore	601.36	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Oxide	419.72	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Ferronickel	606.20	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Unwrought	620.03	do	Free	Free	Free	Free	Free	Free	Free	Free	Free

Commodity	TSUS number	Unit of measure	Rate from which staged	1980	1981	1982	1983	1984	1985	1986	1987
Nickel—Con.											
Waste and scrap	620.04	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Powders	620.32	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Other	603.60	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Nitrogen:											
Fixed (ammonia, fertilizer)	480.65	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Fixed (ammonia, chemical)	417.22	Pct ad val	6.9	6.4	5.9	5.4	4.9	4.3	3.8	3.3	2.8
Oxygen: Other physical elements in any form (includes oxygen)	415.50	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Peat:											
Peat moss	192.50	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Other fertilizers and materials	480.80	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Perlite: Crude or ground	523.81	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Phosphate rock: Phosphates, crude and apatite	480.45	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Platinum-group metals:											
Ore	601.39	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Unwrought:											
Platinum-group metals	605.02	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Alloys	605.03	Pct ad val	20.0	18.5	17.1	15.6	14.1	12.6	11.2	9.7	8.2
Semimanufactured:											
Platinum-group metals	605.07	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Alloys	605.08	Pct ad val	20.0	18.5	17.1	15.6	14.1	12.6	11 2	9.7	8.2
Scrap	605.70	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Potash:											
Potassium chloride, all grades	480.50	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Potassium sulfate, not more than 52 pct K_2O	480.55	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Other potassic fertilizers	480.75	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Pumice and volcanic cinder:											
Used in the manufacture of concrete masonry products	519.05	None	Free	Free.	Free	Free	Free	Free	Free	Free	Free
Crude or crushed:											
Valued not over $15 ton	519.11	Cent lb	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Valued over $15 ton	519.14	do	0.04	.035	.035	.035	.035	.035	.035	.035	.035
In grains or ground, pulverized or refined	519.31	do	0.17	0.16	0.16	0.15	0.15	0.14	0.14	0.13	0.13
Millstones, abrasive wheels, and abrasive articles n.s.p.f.	519.93	Pct ad val	7.0	6.7	6.4	6.1	5.9	5.6	5.3	5.0	4.7
Articles n.s.p.f.	523.61	do	7.0	6.5	6.0	5.4	4.9	4.4	3.9	3.3	2.8
Quartz crystal: Raw quartz	521.21	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Radium: Radioactive isotopes and compounds	494.50	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Rare-earth metals:											
Ore and concentrate:											
Cerium	601.12	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Thorium (including monazite sand)	601.45	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Cerium chloride	418.40	Pct ad val	15.0	14.0	13.1	12.1	11.1	10.1	9.2	8.2	7.2
Cerium oxide	418.42	do	15.0	14.0	13.1	12.1	11.1	10.1	9.2	8.2	7.2
Alloys, including mischmetal	632.78	Cents/lb	50	47	45	43	41	38	36	34	32
Ferrocerium and other pyrophoric alloys	755.35	Cents/lb	50	46	43	39	36	32	29	25	22
		+ Pct ad val	6.0	5.6	5.1	4.7	4.3	3.9	3.5	3.0	2.6

Rhenium:											
Unwrought metal, waste and scrap	628.90	Pct ad val	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Wrought metal	628.95	do	9.0	8.6	8.1	7.7	7.3	6.8	6.4	5.9	5.5
Ammonium perrhenate	417.44	do	4.0	3.9	3.8	3.7	3.6	3.4	3.3	3.2	3.1
Rubidium:											
Rubidium	415.40	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Compounds	423.00	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Rutile:											
Titanium ore (including rutile and rutile sand)	601.51	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Synthetic rutile	603.70	Pct ad val	7.5	7.2	6.9	6.6	6.3	5.9	5.6	5.3	5.0
Salt:											
In brine	420.92	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
In bulk	420.94	do	3.0	2.6	2.3	1.9	1.5	1.1	0.8	0.4	Free
Other	420.96	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Sand and gravel:											
95 or more silica and not more than 0.6 iron oxide	513.11	Cents/ton	25	22	19	16	12	9	6	3	Free
Other	513.14	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Scandium: Metal	632.38	Pct ad val	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Selenium:											
Metal	632.40	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Dioxide	420.50	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Salts	420.52	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Other compounds	420.54	Pct ad val	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Silicon:											
Ferrosilicon:											
8 to 60 pct silicon	606.35	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
60 to 80 pct silicon: over 3 pct calcium	606.36	Pct ad val	1.7	.5¢/lb on Si	.5¢/lb on Si	1.1	1.1	1.1	1.1	1.1	1.1
Other	606.37	do	1.7	.5¢/lb on Si	.5¢/lb on Si	1.6	1.6	1.6	1.6	1.5	1.5
80 to 90 pct silicon	606.39	Pct ad val	2.2	1¢/lb on Si	1¢/lb on Si	1.9	1.9	1.9	1.9	1.9	1.9
Over 90 pct silicon	606.40	do	10.0	2¢/lb on Si	2¢/lb on Si	9.3	8.6	7.9	7.2	6.5	5.8
Silicon:											
96.0 to 99.0 pct	632.86	do	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
99.0 to 99.7 pct	632.42	do	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Over 99.7 pct	632.43	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Silver:											
Not rolled, unwrought (except bullion, dore, or participates):											
Platium-plated	605.46	do	16.0	14.9	13.9	12.8	11.8	10.7	9.6	8.6	7.5
Gold-plated	605.47	do	25.0	23.1	21.3	19.4	17.5	15.6	13.8	11.9	10.0
Rolled, unworked, or semimanufactured:											
Plates and sheets	605.60	do	12.0	11.3	10.6	9.9	9.3	8.6	7.9	7.2	6.5
Other: rolled											
silver	605.65	do	10.5	9.9	9.4	8.8	8.3	7.7	7.1	6.6	6.0
other	605.66	do	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Compounds	420.60	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Slag (iron and steel)	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP
Sodium carbonate:											
Bicarbonate	420.72	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Calcined (soda ash)	420.84	Pct ad val	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Hydrated and sesquicarabonate	420.86	Cent/lb	.2	.2	.2	.2	.1	.1	.1	.1	.1
Sodium sulfate:											
Crude (salt cake)	421.42	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Anhydrous	421.44	Cents/ton	40	39	38	37	36	36	35	34	33
Crystallized	421.46	Pct ad val	3.1	3.0	3.0	2.9	2.8	2.7	2.7	2.6	2.5

NAP Not applicable.

Commodity	TSUS number	Unit of measure	Rate from which staged	1980	1981	1982	1983	1984	1985	1986	1987
Stone:											
Stone chips, etc.:											
Marble, breccia, and onyx chips	513.21	do	5.0	4.4	3.8	3.1	2.5	1.9	1.3	.6	Free
Slate	513.31	do	5.0	4.4	3.8	3.1	2.5	1.9	1.3	.6	Free
Limestone:											
For cement	513.35	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Other	513.36	Cents/short ton	10	8	7	6	5	3	2	1	Free
Other	513.41	Pct ad val	2.5	2.2	1.9	1.6	1.3	0.9	0.6	0.3	Free
Stone, statuary, and sculptures n.s.p.f.	513.51	do	4.0	3.9	3.8	3.7	3.6	3.4	3.3	3.2	3.1
Granite and articles of granite: Not manufactured, etc.	513.61	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Suitable for use as monumental, etc.											
Not pitched, etc.	513.71	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Pitched, etc.	513.74	Pct ad val	6.0	5.8	5.6	5.3	5.1	4.9	4.7	4.4	4.2
Other:											
Not decorated	513.81	do	7.5	7.2	6.9	6.5	6.2	5.9	5.6	5.2	4.9
Decorated	513.84	do	13.5	12.7	11.9	11.0	10.2	9.4	8.6	7.7	6.9
Jet and articles of alabaster, etc.:											
Jet not manufactured	513.91	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Other n.s.p.f.	513.94	Pct ad val	8.5	8.1	7.7	7.3	6.9	6.5	6.1	5.7	5.3
Limestone, etc.:											
Crude:											
Not suitable, etc.	514.11	Cents short ton	10	Free	Free	Free	Free	Free	Free	Free	Free
Suitable, etct.											
Not hewn, etc.	514.21	Cent ft^3	10	.9	.7	.6	.5	.4	.2	.1	Free
Hewn, etc.	514.24	Pct ad val	10.5	9.9	9.4	8.8	8.3	7.7	7.1	6.6	6.0
Other, n.s.p.f.:											
Articles of chalk	514.34	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Other: Not decorated	514.41	do	7.5	7.2	6.9	6.5	6.2	5.9	5.6	5.2	4.9
Decorated	514.44	do	13.5	12.7	11.9	11.0	10.2	9.4	8.6	7.7	6.9
Marble, etc.:											
Marble, breccia in block, rough, etc.	514.51	Cents ft^3	13.5	13.3	13.1	12.9	12.7	12.6	12.4	12.2	12.0
Onyx, in block, etc.	514.54	do	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Marble, breccia or onyx, sawed or dressed, over 2 in. thick	514.57	do	25.0	24.4	23.7	23.1	22.5	21.9	21.2	20.6	20.0
Slabs:											
Not rubbed and not polished, etc.	514.61	Pct ad val	2.5	2.5	2.4	2.4	2.3	2.3	2.2	2.2	2.1
Rubbed or polished, etc.	514.65	do	3.5	3.4	3.3	3.2	3.2	3.1	3.0	2.9	2.8
Other n.s.p.f.	514.81	do	10.5	9.9	9.4	8.8	8.3	7.7	7.1	6.6	6.0
Quartzite	514.91	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Slate:											
Roofing	515.11	Pct ad val	12.5	11.8	11.0	10.3	9.6	8.8	8.1	7.3	6.6
Other	515.14	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Travertine:											
Not hewn, etc.	515.21	Cents ft^3	5.0	4.9	4.7	4.6	4.5	4.4	4.2	4.1	4.0
Hewn, etc.	515.24	Pct ad val	10.5	9.9	9.4	8.8	8.3	7.7	7.1	6.6	6.0
Other:											
Not decorated	515.31	do	7.5	7.2	6.9	6.5	6.2	5.9	5.6	5.2	4.9
Decorated	515.41		13.5	12.7	11.9	11.0	10.2	9.4	8.6	7.7	6.9
Stone, etc. not manufactured, etc.	515.41	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Suitable to use as monumental, etc.											
Not hewn, etc.	515.51	Cent ft^3	1.0	.9	.7	.6	.5	.4	.2	.1	Free
Hewn	515.54	Pct ad val	10.5	9.9	9.4	8.8	8.3	7.7	7.1	6.6	6.0

Other:											
Not decorated	515.61	do	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Decorated	515.64	do	13.5	10.5	7.5	6.9	6.9	6.9	6.9	6.9	6.9
Strontium: Celestite	421.82	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Sulfur: Crude	415.45	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Talc and pyrophyllite:											
Crude, not ground	523.31	Cent lb	.02	.02	.02	.02	.02	.02	.02	.02	.02
Ground, washed, powdered	523.33	Pct ad val	6.0	5.6	5.1	4.7	4.2	3.8	3.3	2.9	2.4
Cut or sawed	523.35	Cent lb	.2	.1	.1	.1	.1	Free	Free	Free	Free
Other, n.s.p.f.	523.37	Pct ad val	12.0	9.0	6.0	4.8	4.8	4.8	4.8	4.8	4.8
Tantalum:											
Potassium fluotantulate	420.36	Pct ad val	4.0	3.9	3.8	3.7	3.6	3.4	3.3	3.2	3.1
Concentrate	601.42	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Synthetic tantalum—columbium concentrate	603.70	Pct ad val	7.5	7.2	6.9	6.6	6.3	5.9	5.6	5.3	5.0
Unwrought, other than alloys and waste and scrap	629.05	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Alloys:											
Unwrought	629.07	do	7.5	7.2	6.9	6.5	6.2	5.9	5.6	5.2	4.9
Wrought	629.10	do	9.0	8.6	8.1	7.7	7.3	6.8	6.4	5.9	5.5
Tellurium:											
Metal	632.48	do	4.0	3.5	3.0	2.5	2.0	1.5	1.0	.5	Free
Compounds	421.90	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Salts	427.12	do	5.0	4.8[1]	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Thallium:											
Unwrought and waste and scrap	632.50	do	5.0	4.4	3.8	3.1	2.5	1.9	1.3	.6	Free
Compounds	422.00	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Thorium:											
Ore including manazite sand	601.45	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Compounds:											
Nitrate	422.10	Pct ad val	17.5	16.3	15.1	13.9	12.7	11.4	10.2	9.0	7.8
Oxide	422.12	do	17.5	16.3	15.1	13.9	12.7	11.4	10.2	9.0	7.8
Other	422.14	do	17.5	16.3	15.1	13.9	12.7	11.4	10.2	9.0	7.8
Metal	632.52	do	6.0	5.8	5.6	5.3	5.1	4.9	4.7	4.4	4.2
Alloys	632.68	do	7.0	6.9	6.4	5.8	5.3	4.7	4.1	3.6	3.0
Tin:											
Ore and concentrate	601.48	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Metal	622.02	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Waste and scrap	622.10	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Titanium:											
Unwrought:											
Other than alloys, waste and scrap	629.12	Pct ad val	18.0	16.7	15.3	14.0	12.6	11.3	9.9	8.6	7.2
Alloys	629.24	do	18.0	18.0	18.0	17.5	17.0	16.5	16.0	15.5	15.0
Wrought	629.20	do	18.0	18.0	18.0	17.5	17.0	16.5	16.0	15.5	15.0
Tungsten:											
Ore and concentrate	601.54	Cents lb w content	25	17	17	17	17	17	17	17	17
Ferrotungsten	606.48	Pct ad val	9.3	6 + 21c lb W	6 + 21c lb W	8.8	8.2	7.5	6.9	6.2	5.6
Uranium (depleted):											
Ores and concentrate	601.57	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Compounds:											
Oxide	422.57	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Other	422.52	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Metal	629.50	Pct ad val	12.5	11.6	10.6	9.7	8.8	7.8	6.9	5.9	5.0
Vanadium:											
Ore and concentrate	601.60	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Vanadium-bearing materials (slags and residues)	603.65	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Metal, unwrought, waste and scrap	632.58	Pct ad val	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7

Commodity	TSUS number	Unit of measure	Rate from which staged	1980	1981	1982	1983	1984	1985	1986	1987
Vanadium—Con.											
Alloys, unwrought	632.68	do	7.0	6.9	6.4	5.8	5.3	4.7	4.1	3.6	3.0
Metal, wrought	633.00	do	9.0	8.6	8.1	7.7	7.3	6.8	6.4	5.9	5.5
Ferrovanadium	606.50	do	6.0	6.0	6.0	5.7	5.4	5.1	4.8	4.5	4.2
Carbide	422.58	do	6.0	5.8	5.6	5.3	5.1	4.9	4.7	4.4	4.2
Pentoxide canhydride	422.60	do	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Compounds:											
Other	422.62	do	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Salts	427.22	do	16.0	14.9[1]	13.9	12.8	11.8	10.7	9.6	8.6	7.5
Vermiculite (crude): Crude or processed	532.81	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Yttrium:											
Ore and concentrate:											
Cerium ore	601.12	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Thorium ore (including monazite sand)	601.45	do	Free	Free	Free	Free	Free	Free	Free	Free	Free
Metal	632.38	Pct ad val	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Zinc:											
Ore and concentrates	602.20	Cent/lb Zu content	0.67	.62	.58	.53	.48	.44	.39	.35	.30
Fume	603.50	Cent/lb Cu	.80	.74	.68	.62	.56	.5	.44	.38	.32
		+ Cent/lb Pb	.75	.69	.64	.58	.52	.47	.41	.36	.3
		+ Cent/lb Zu	.67	.62	.58	.53	.48	.44	.39	.35	.3
Metal	626.02	Pct ad val	2.0	1.9	1.9	1.8	1.8	1.7	1.6	1.6	1.5
Zirconium:											
Oxide	422.80	Pct ad val	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Other compounds	422.82	do	5.0	4.8	4.7	4.5	4.4	4.2	4.0	3.9	3.7
Ore and concentrate	601.60	None	Free	Free	Free	Free	Free	Free	Free	Free	Free
Unwrought:											
Waste and scrap	629.60	Pct ad val	6.0	5.8	5.6	5.3	5.1	4.9	4.7	4.4	4.2
Alloys	629.62	do	7.5	7.2	6.9	6.5	6.2	5.9	5.6	5.2	4.9
Wrought	629.65	do	9.0	8.6	8.1	7.7	7.3	6.8	6.4	5.9	5.5

Sources: U.S. Bureau of Mines Mineral Commodity Summaries, 1979; Geneva (1979) Protocol to the GATT, Schedule XX U.S.A., June 1979; Federal Register, Dec. 13, 1979, Part VII; 1980 Tariff Schedule of the United States, Federal Register, July 2, 1980, Part VI, Customs Valuation Code.

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